

Remarks

Independent claims 1, 11, and 14 were rejected under 35 USC §102(e) as being anticipated by Jones et al. (US 6,108,317). Analysis of Jones reveals that Jones teaches using a PN code for the I channel, and a reversed PN code for the Q channel. These codes are created, and each user within the communication system will have all their data spread with a single, cyclically shifted version of the code. In other words, each user in Jones will have a single cyclic shift applied to all data received. The cyclic shift is used by Jones to distinguish among users by creating distinct codes that are nothing more than cyclically shifted versions of the PN codes used. Thus, for example, the code used to spread all data transmitted to a first user will have a first cyclic shift, while the code used to spread all data transmitted to a second user will have a second cyclic shift, . . . , etc.

The above facts are evident in Col. 15, lines 6-10 where Jones states that “[t]he transmit signal . . . is then differentially encoded and spread by the commanded cyclic shift PN code sequence.” Additionally, Col. 20, lines 3-9 of Jones states that “each user’s information bit . . . is spread with a distinct code.” Thus, Jones clearly teaches that all data transmitted to a user is spread using a PN code having a distinct cyclic shift.

In contrast, the Applicants claimed invention modulates each symbol by spreading each symbol with a code that is cyclically shifted based on a value of the symbol. Thus for a single user, each symbol will be spread using a different cyclic shift amount, the amount being determined by a value of the symbol. Nowhere in Jones is it taught or otherwise suggested to cyclically shift a PN and reversed PN code based on a value of the symbol. Because of this, claims 1, 11, and 14 are not anticipated by Jones.

Regarding claim 12; this claim was rejected under 35 USC §103(a) as being unpatentable over Jones. Claim 12 also claims the fact that a code is cyclically shifted based on a value of the symbol. Because of this, claim 12 is allowable over the prior art of record.

Regarding all other claims, because they depend from allowable base claims, all other claims are allowable over the prior art of record.

No amendment made was related to the statutory requirements of patentability unless expressly stated herein; and no amendment made was for the purpose of narrowing the scope of any claim, unless Applicant has argued herein that such amendment was made to distinguish over a particular reference or combination of references. As the Applicant has overcome all substantive rejections given by the

Examiner the Applicant contends that this Amendment, with the above discussion, overcomes the Examiner's rejections to the pending claims. Therefore, the Applicant respectfully requests allowance of the application. If the Examiner is of the opinion that any issues regarding the status of the claims remain after this response, the Examiner is invited to contact the undersigned representative to expedite resolution of the matter. Finally, please charge any fees (including extension of time fees) or credit overpayment to Deposit Account No. 502117.

Respectfully Submitted,
Gorday, ET AL.

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